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10/720,143	11/25/2003	Dana Andrew Oliver	5178A	4311

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EXAMINER

FERGUSON, MICHAEL P

ART UNIT PAPER NUMBER

3679

DATE MAILED: 06/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/720,143

Applicant(s)

OLIVER ET AL.

Examiner

Michael P. Ferguson

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 March 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 28-40, 42-48 and 50-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 28-39 and 53 is/are allowed.
- 6) ☒ Claim(s) 40, 42-48 and 50-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Applicant should note that a new examiner has examined the application.

Accordingly, the claims may have been interpreted differently.

#### ***Information Disclosure Statement***

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

#### ***Specification***

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 40, 42-48 and 50-52 are rejected under 35 U.S.C. 102(e) as being anticipated by King et al. (US 6,491,273).

As to claim 40, King et al. disclose a surgical arm system, comprising:

a mounting component **12** on a first end of the surgical arm system;

a holding component **18** on a second end of the surgical arm system for holding a surgical instrument therein;

a plurality of arm segments **24,26** for connecting the mounting component to the holding component wherein a first arm **24** segment includes a quick connect member **82** thereon and a second arm **26** segment includes a quick connect adaptor **84** thereon and wherein the first and second arm segments are configured to allow a gas to pass there through when the quick connect adaptor and quick connect member are interconnected;

the holding component including a ball **102** (ball shaped member **102** having a ball shaped surface) having an opening defined therein, wherein the opening is sized to accommodate a portion of a surgical instrument **94** therein, the ball having a diameter that is compressible to define engaging contact between the ball and the surgical instrument and wherein the diameter of the ball is movable between first and second

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positions by supplying and discontinuing a supply of pressurized gas through the first and second arm segments to the ball (Figures 1-4).

As to claim 42, King et al. disclose a system wherein the holding component **18** comprises a retention guard **102** insertable within the holding element, wherein the retention guard is movable in response to supplying or discontinuing the supply of a pressurized gas to the holding element (Figure 4).

As to claim 43, King et al. disclose a system wherein the holding component **18** comprises a retention guard **102** insertable within the holding element, wherein the retention guard is biased to contact the surgical instrument **94** in a first position of the retention guard (Figure 4).

As to claim 44, King et al. disclose a system wherein the holding component **18** comprises a retention guard **102** insertable within the holding element, wherein the retention guard is biased to contact the surgical instrument **94** in a second position of the retention guard (Figure 4).

Applicant is reminded that the terms "first" and "second" are relative terms.

As to claim 45, King et al. disclose a system wherein the holding component **18** has a predetermined degree of rotation (via mid-joint **16**) of up to about 90 degrees (Figure 1).

As to claim 46, King et al. disclose a surgical arm system, comprising:

a quick connect system **16** for bringing into communication a first component **24** of a surgical arm system with a second component **26** of the surgical arm system;  
a quick connect member **82** attached to a first component **24**; and

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a quick connect adapter **84** attached to a second component **26**; and having an actuator (pressurized gas supply) attached thereto, wherein the quick connect member is shaped to be insertable into the quick connect adapter to bring the first component into communication with the second component and to allow a gas to flow therethrough;

a holding component **18** on one of the first or second components of the surgical arm system for holding a retaining element **103** that is sized and shaped to retain a portion of a predetermined surgical instrument **94** therein and wherein the retaining element includes an opening defined therein, wherein the opening is sized to accommodate a portion of the surgical instrument therein and at least one retention guard **102** disposed within the retaining element, wherein each of the at least one retention guard is in contact with the surgical instrument while the retaining element is in a first position so as to define a transitional fit between each of the at least one retention guard and the surgical instrument and wherein the retaining element comprises a ball shaped member **102** (ball shaped member **102** having a ball shaped surface) wherein the diameter of the ball shaped member is movable between first and second positions by supplying and discontinuing a supply of pressurized gas to the ball shaped member (Figures 1-4).

As to claim 47, King et al. disclose a system wherein actuation of the actuator is effective to place the actuator in a first position to allow for removal (relative rotation) of the quick connect member **82** from the quick connect adapter **84** via the application of a predetermined force upon the actuator of the quick connect member (Figure 3).

As to claim 48, King et al. disclose a system wherein release of the actuator is effective to allow the actuator to return to a second position wherein the quick connect member **82** and the quick connect adapter **84** are interconnected to allow for the supply of a pressurized gas to the retaining element **103** (Figure 3).

As to claim 50, King et al. disclose a system wherein the holding component **18** comprises a retention guard **102** insertable within the holding element, wherein the retention guard is movable in response to supplying or discontinuing the supply of a pressurized gas to the holding element (Figure 4).

As to claim 51, King et al. disclose a system wherein the holding component **18** comprises a retention guard **102** insertable within the holding element, wherein the retention guard is biased to contact the surgical instrument **94** in a first position of the retention guard (Figure 4).

As to claim 52, King et al. disclose a system wherein the holding component **18** comprises a retention guard **102** insertable within the holding element, wherein the retention guard is biased to contact the surgical instrument **94** in a second position of the retention guard (Figure 4).

Applicant is reminded that the terms "first" and "second" are relative terms.

***Allowable Subject Matter***

5. Claims 28-39 and 53 are allowed.
6. The following is a statement of reasons for the indication of allowable subject matter:

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As to claim 28, Hatakeyama (US 4,403,959) discloses the claimed surgical arm system with the exception of wherein the opening is sized to accommodate a proximal end of the surgical instrument and at least one retention guard disposed within the retaining element, wherein each of the at least one retention guard is in contact with the surgical instrument while the retaining element is in a first position so as to define a transitional fit between each of the at least one guard and the surgical instrument and wherein the retaining element is transitionable to and from the first position by, respectively, supplying and discontinuing a supply of a pressurized gas to the retaining element.

As to claim 53, Hatakeyama discloses the claimed surgical arm system with the exception of wherein the opening is sized to accommodate a portion of the surgical instrument therein and at least one retention guard disposed within the retaining element, wherein the retaining element comprises a ball shaped member wherein the diameter of the ball shaped member is movable between first and second positions by supplying and discontinuing a supply of pressurized gas to the ball shaped member.

There is no teaching or suggestion, absent the applicants' own disclosure, for one having ordinary skill in the art at the time the invention was made to modify a surgical arm system as disclosed by Hatakeyama to have the above mentioned elemental features.

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 40, 42-48 and 50-52 have been considered but are moot in view of the new ground(s) of rejection.



### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure. The following patents show the state of the art with respect to surgical arm systems:

Sakurai (US 5,336,089) and Nakamura (US 5,609,565) are cited for pertaining to systems comprising a plurality of arm segments.

Barsby (US 3,624,905), Lieb et al. (US 3,499,223) and Lieb et al. (US 4,318,695) are cited for pertaining to systems comprising retention guards disposed within retaining elements.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Ferguson whose telephone number is (571)272-7081. The examiner can normally be reached on M-F (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571)272-7087. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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